

HT-03-604

SEP 26 2003



September 24, 2003

To: Commissioner for Patents  
P.O.Box 1450  
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572  
28 Davis Avenue  
Poughkeepsie, N.Y. 12603

Subject: | Serial No. 10/613,598 07/03/03 |  
| Kenichi Takano  
| DOUBLE LAYER LONGITUDINAL BIAS  
STRUCTURE  
Grp. Art Unit:

#### INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation  
In An Application.

The following Patents and/or Publications are submitted to  
comply with the duty of disclosure under CFR 1.97-1.99 and  
37 CFR 1.56. Copies of each document is included herewith.

#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being  
deposited with the United States Postal Service as first class  
mail in an envelope addressed to: Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450, on September 26, 2003.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

Stephan B. Ackerman 9/26/03

U.S. Patent 6,542,341 to Carey et al., "Magnetic Sensors Having an Antiferromagnetic Layer Exchange/Coupled to a Free Layer," describes an additional bias field that balances the total transverse internal magnetic field.

U.S. Patent 6,396,669 to Gill, "AP Pinned PTMN Spin Valve Read Head Biased for Playback Symmetry and Magnetic Stability," discloses a spin valve sensor of a read head having a platinum manganese (PtMn) pinning layer that pins a magnetic moment of an antiparallel (AP) pinned layer structure.

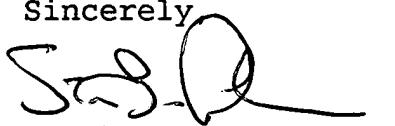
U.S. Patent 6,362,941 to Gill, "Spin Valve Sensor Having Free Layer Stabilized by Ferromagnetic and Sense Current Fields," provides a horizontal component of a ferromagnetic coupling field on the free layer of a spin valve sensor in the same direction as a longitudinal hard biasing field for magnetically stabilizing the free layer.

U.S. Patent 6,338,899 to Fukuzawa et al., "Magneto-resistance Effect Element, Magnetic Head, Magnetic Head Assembly, Magnetic Storage System," discloses a high-sensitivity and high-reliability magnetoresistance effect device (MR device) in which bias point designing is easy, and also a magnetic head, a magnetic head assembly and a magnetic recording/reproducing system incorporating the MR device.

U.S. Patent 6,517,896 to Horng et al., "Spin Filter Bottom Spin Valve Head with Continuous Spacer Exchange," discloses a high performance specular free layer bottom spin valve.

U.S. Patent 6,313,973 to Fuke et al., "Laminated Magneto-restrictive Element of an Exchange Coupling Film, an Anti-ferromagnetic Film and a Ferromagnetic Film and a Magnetic Disk Drive Using Same," discloses a magnetoresistive element having an change coupling film utilizing an exchanging coupling between an antiferromagnetic film and a ferromagnetic film, a magnetic head using the magnetoresistive element, and a magnetic disk drive using the magnetic head.

Sincerely



Stephen B. Ackerman,  
Reg. No. 37761

Form PTO-1449	SEP 26 2003	Patent Number 10/613,598						
<del>SEARCHED</del>								
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION								
SEP 26 2003 (or several sheets if necessary)								
<table border="1"> <tr> <td>Document Number (Serial No.) <b>HT-03-004</b></td> <td>Application Number <b>10/613,598</b></td> </tr> <tr> <td colspan="2">Applicant <b>Kenichi Takano</b></td> </tr> <tr> <td>Filing Date <b>07/03/03</b></td> <td>Drawn At U.S.</td> </tr> </table>			Document Number (Serial No.) <b>HT-03-004</b>	Application Number <b>10/613,598</b>	Applicant <b>Kenichi Takano</b>		Filing Date <b>07/03/03</b>	Drawn At U.S.
Document Number (Serial No.) <b>HT-03-004</b>	Application Number <b>10/613,598</b>							
Applicant <b>Kenichi Takano</b>								
Filing Date <b>07/03/03</b>	Drawn At U.S.							

## U. S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

Reference	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No

**OTHER DOCUMENTS** (Including Author, Title, Date, Portion or Pages, Etc.)


OKLADKA

DATE CONSIDERED

**EXAMINER:** Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.